

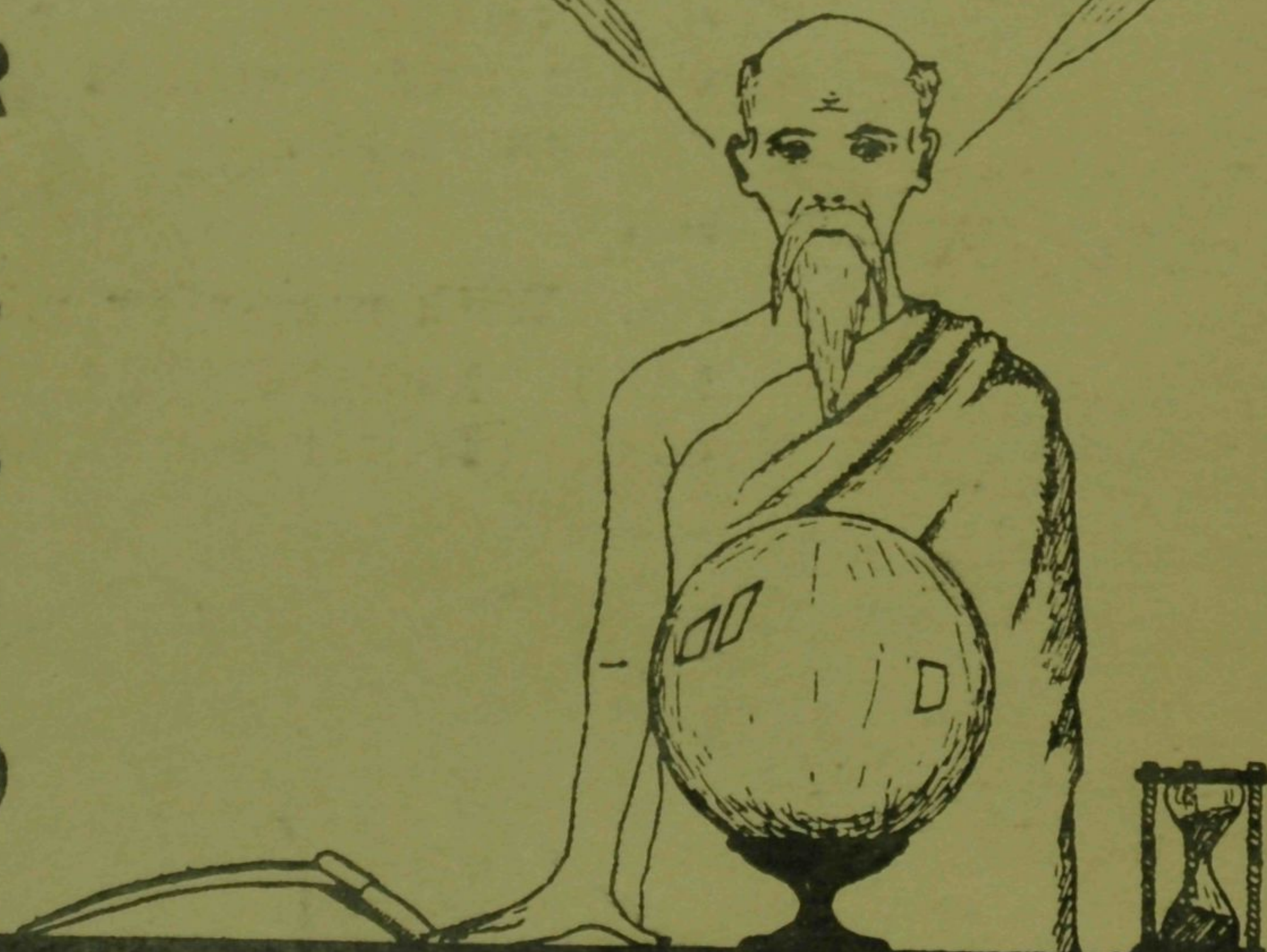
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ELECTRICAL SHOW



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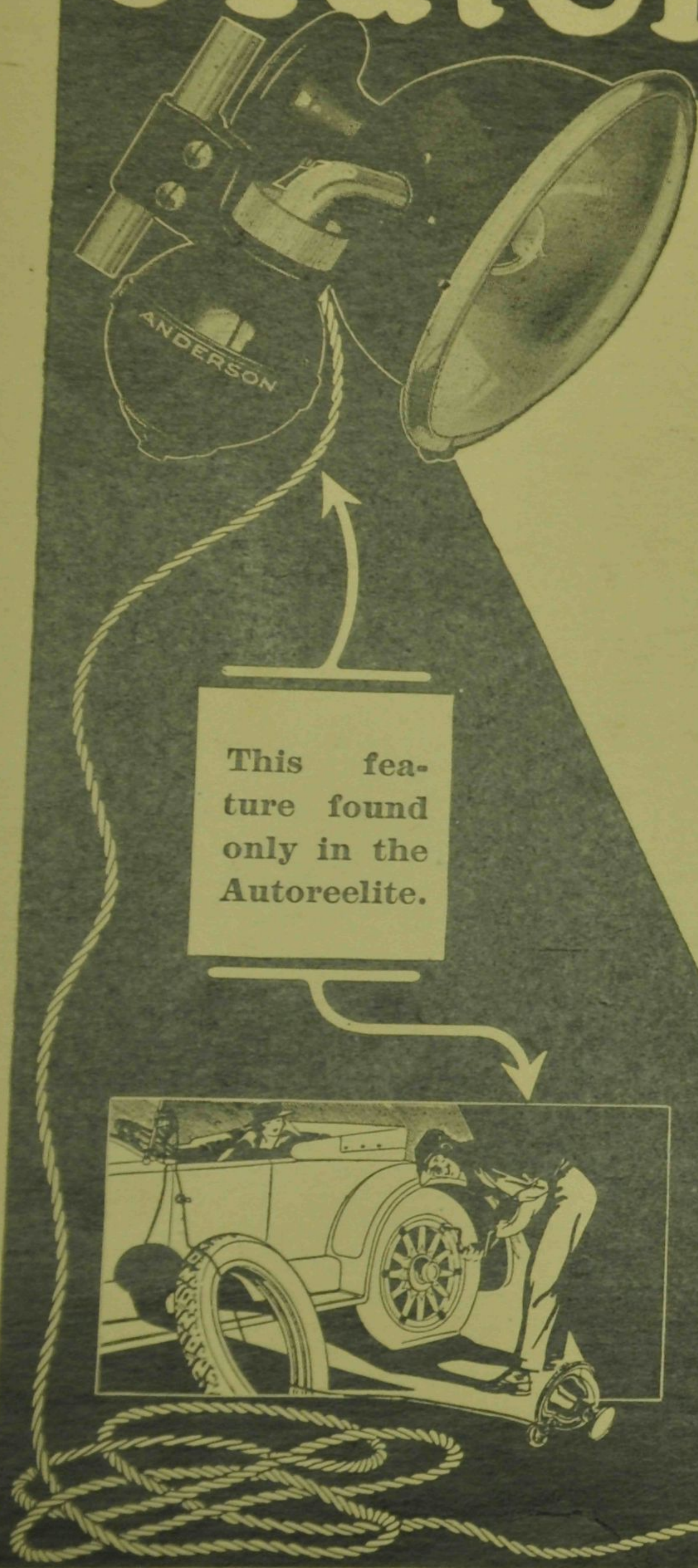


EE SOCIETY-UNIV. OF ILL
PROGRAM

EE LABORATORY-1920-GYM ANNEX

F. J. Jirka. '21.

Autoreelite

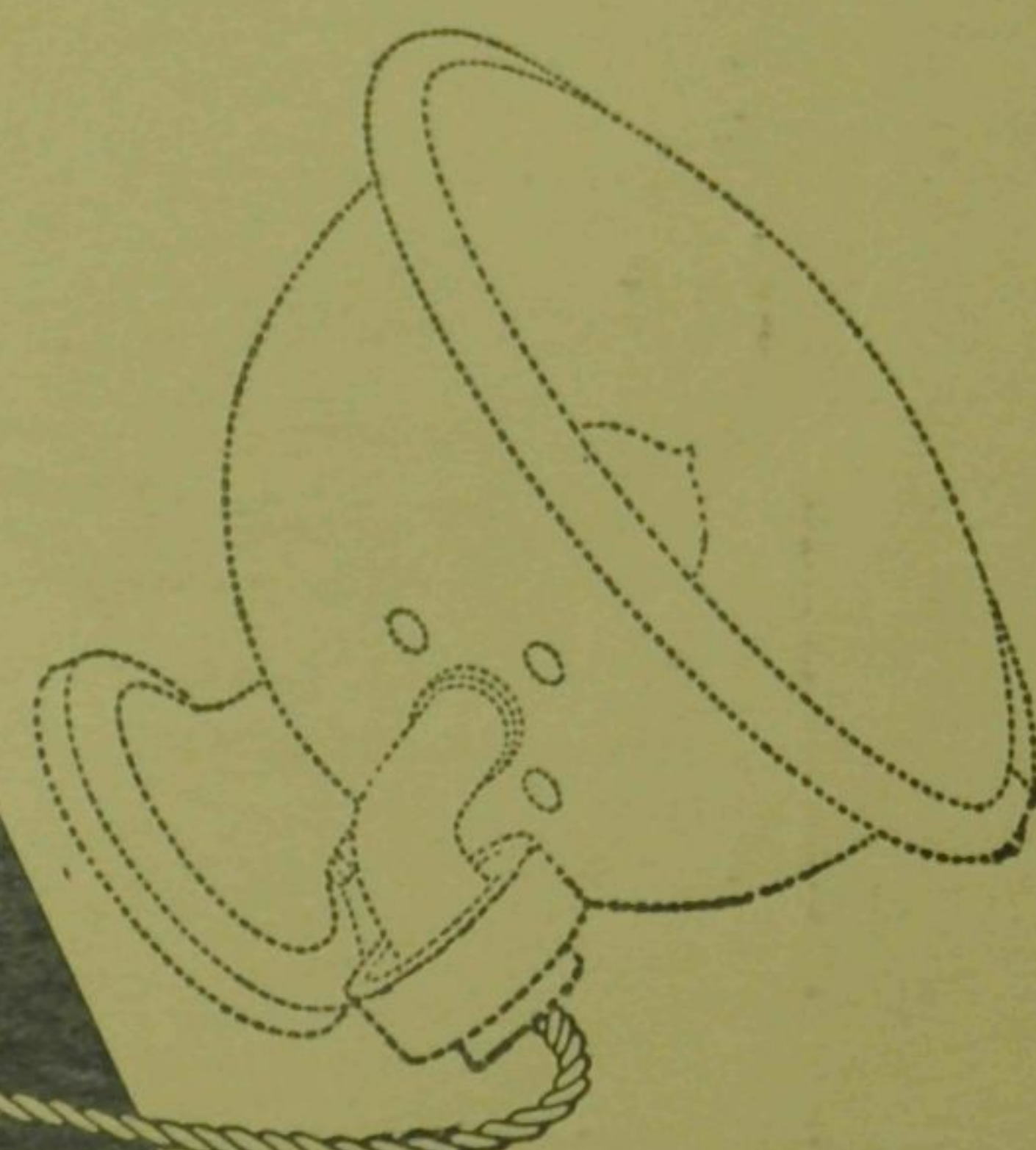


The 3-in-1 Lamp

Spot-light Trouble-light
Portable-light

With the Anderson Autoreelite on your car you need have no fear of a breakdown on the road after dark. To use as a "trouble-light" simply un-screw the knurled nut and withdraw the lamp to the desired length. 12 feet of cord on an automatic reel—cord winds and unwinds just like a curtain roller.

Cat.
No. (With rear-view mirror) Price
3140 Model B-6 20 c.p. \$10.00
3141 Model B-7 32 c.p. 12.00

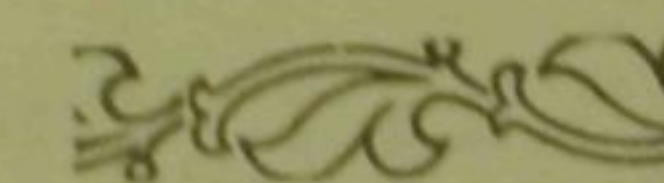


Manufacturers and Patentees
ANDERSON ELECTRIC & EQUIPMENT CO.
(Formerly Anderson Electric Specialty Co.)
154-160 Whiting St., Chicago, Illinois

Don't miss seeing...

"DUPLEXALITE"

The NEW lighting fixture that is more than a fixture, it is an important part of your decorative scheme



H. C. WHITE ELECTRIC CO.

South Neil Street

Champaign

Western Electric Farm Power Plants

E-Z-Way Vacuum Washers

BOOTH NO. 13

"The Last Word In
Electric Transportation"

ILLINOIS TRACTION SYSTEM

(McKinley Lines)

CALDWELL ELECTRIC CORPORATION

ESTABLISHED
1902

MANUFACTURERS

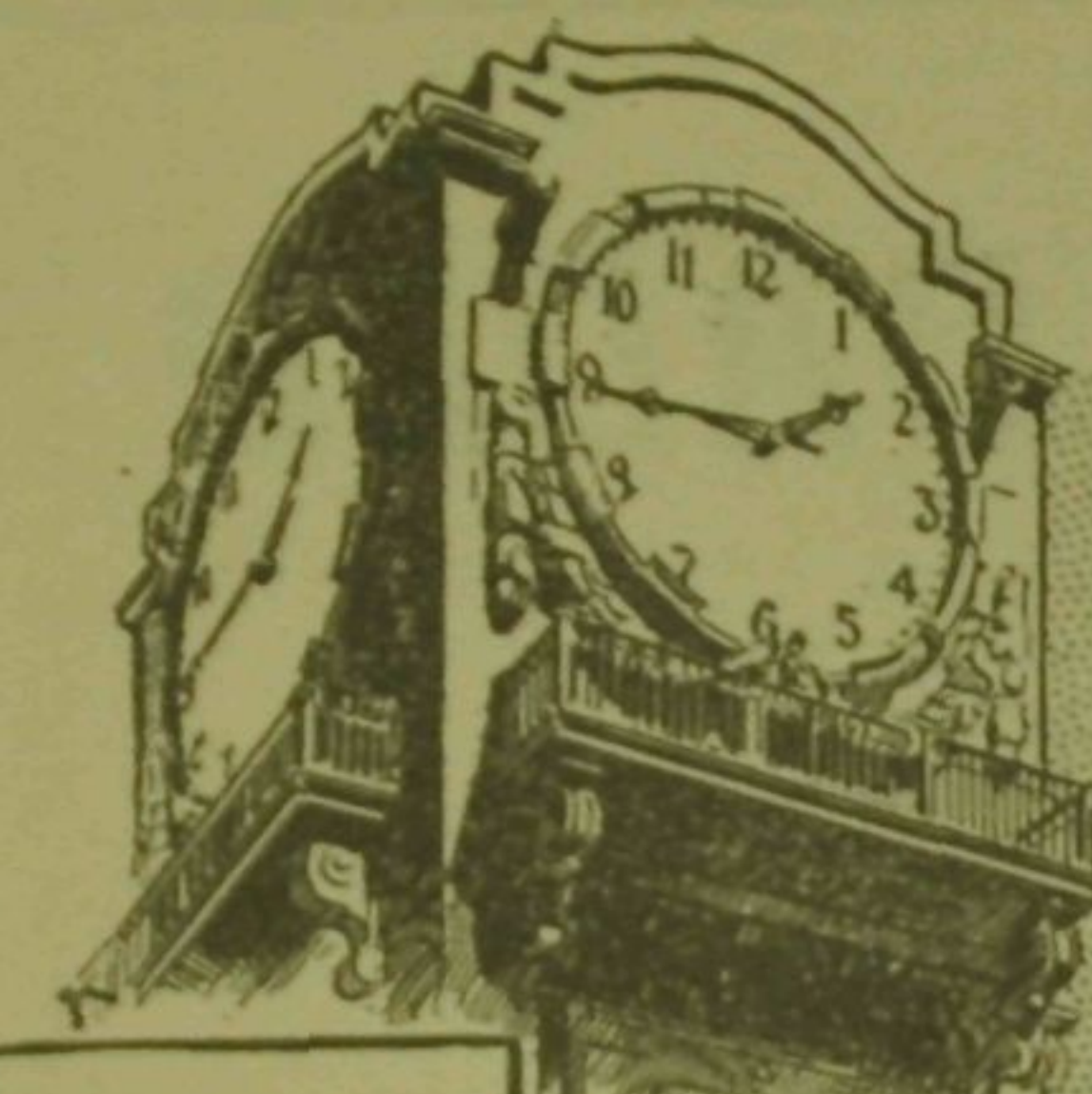
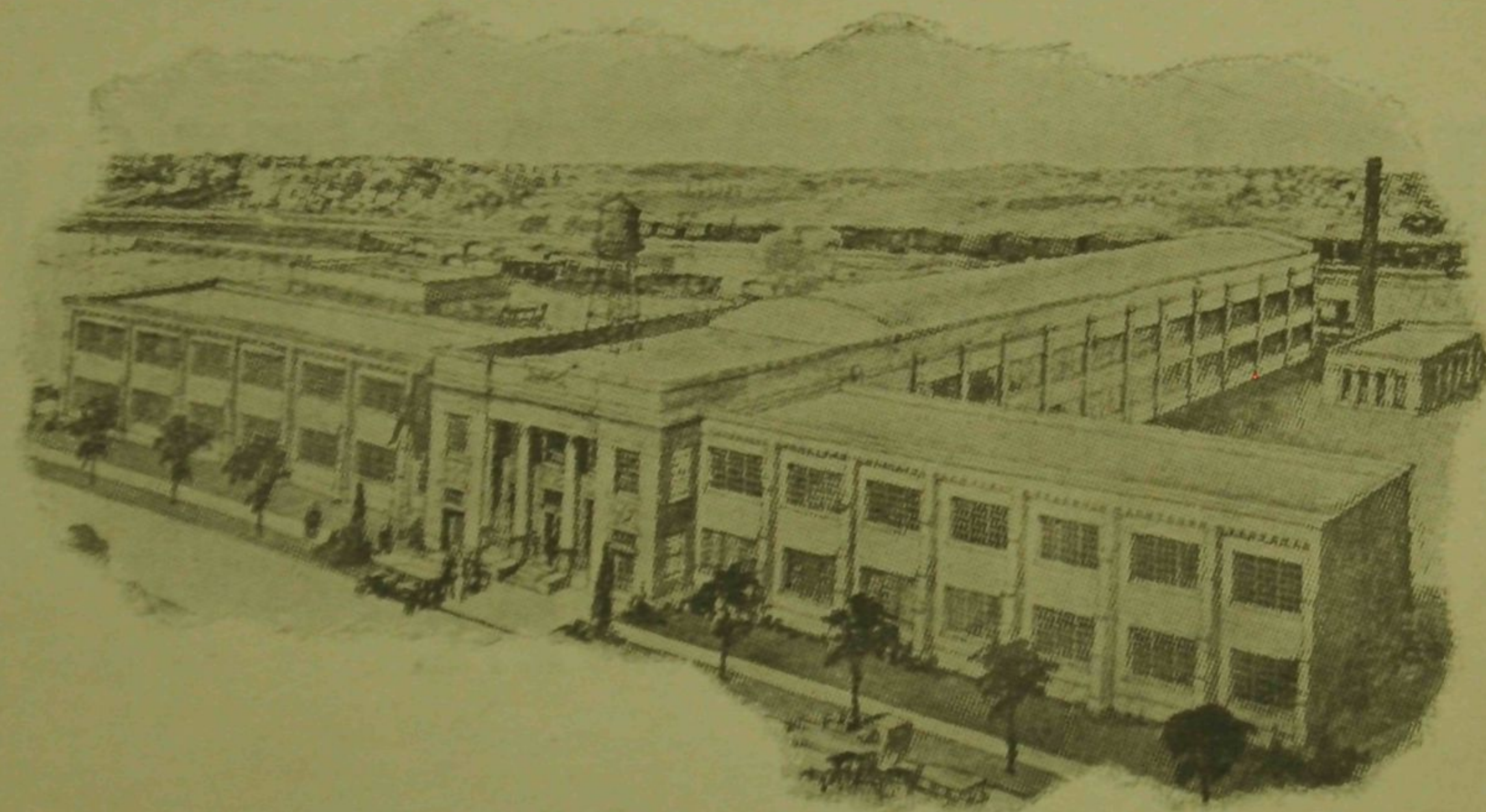
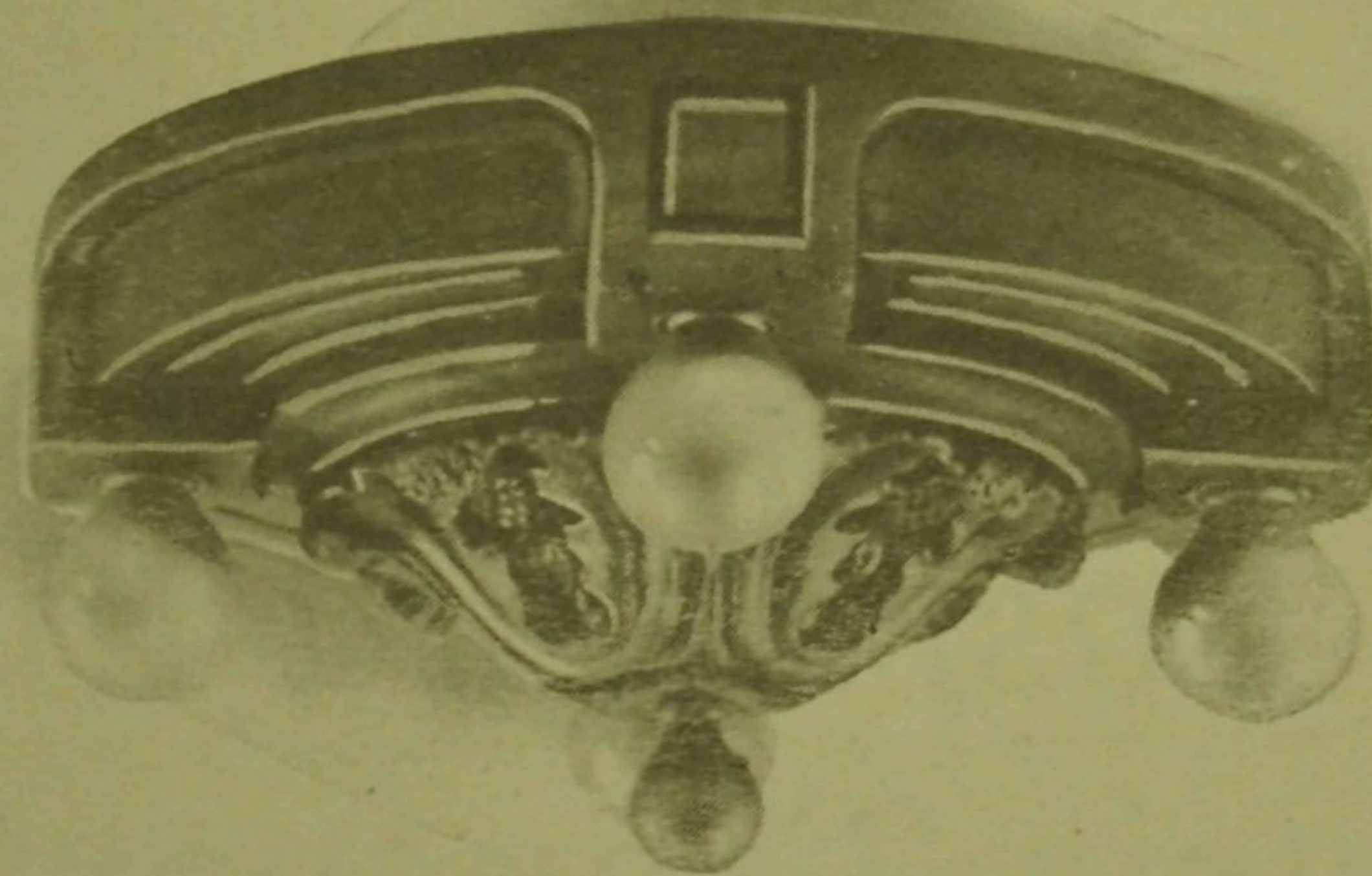
LIGHTING FIXTURES • ELECTRICAL GOODS

OFFICE AND FACTORY • 1002 N. MARKET ST.
CHAMPAIGN • ILLINOIS • U.S.A.

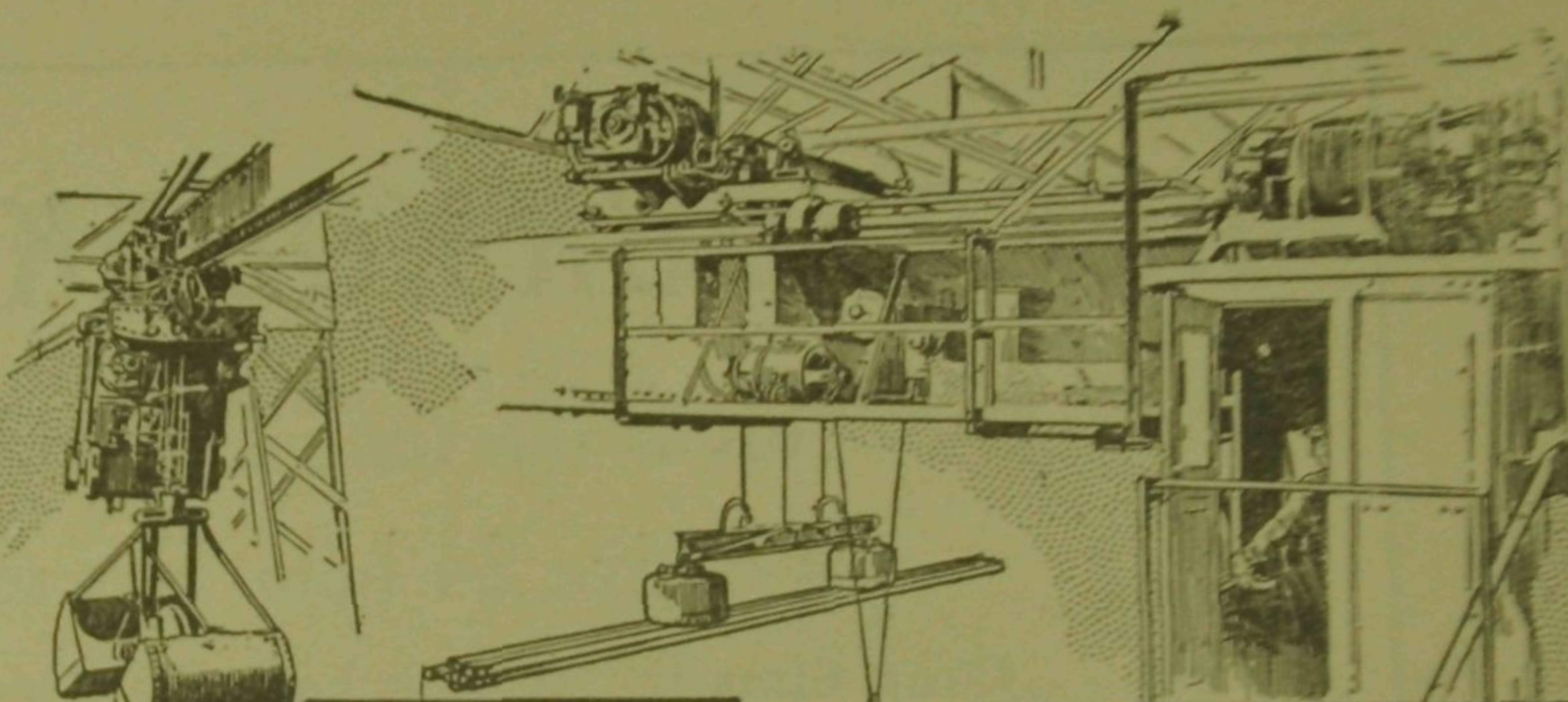
CABLE ADDRESS

"CALDWELL"
CODE { WESTERN UNION
A B C 5TH EDITION

JOBBER

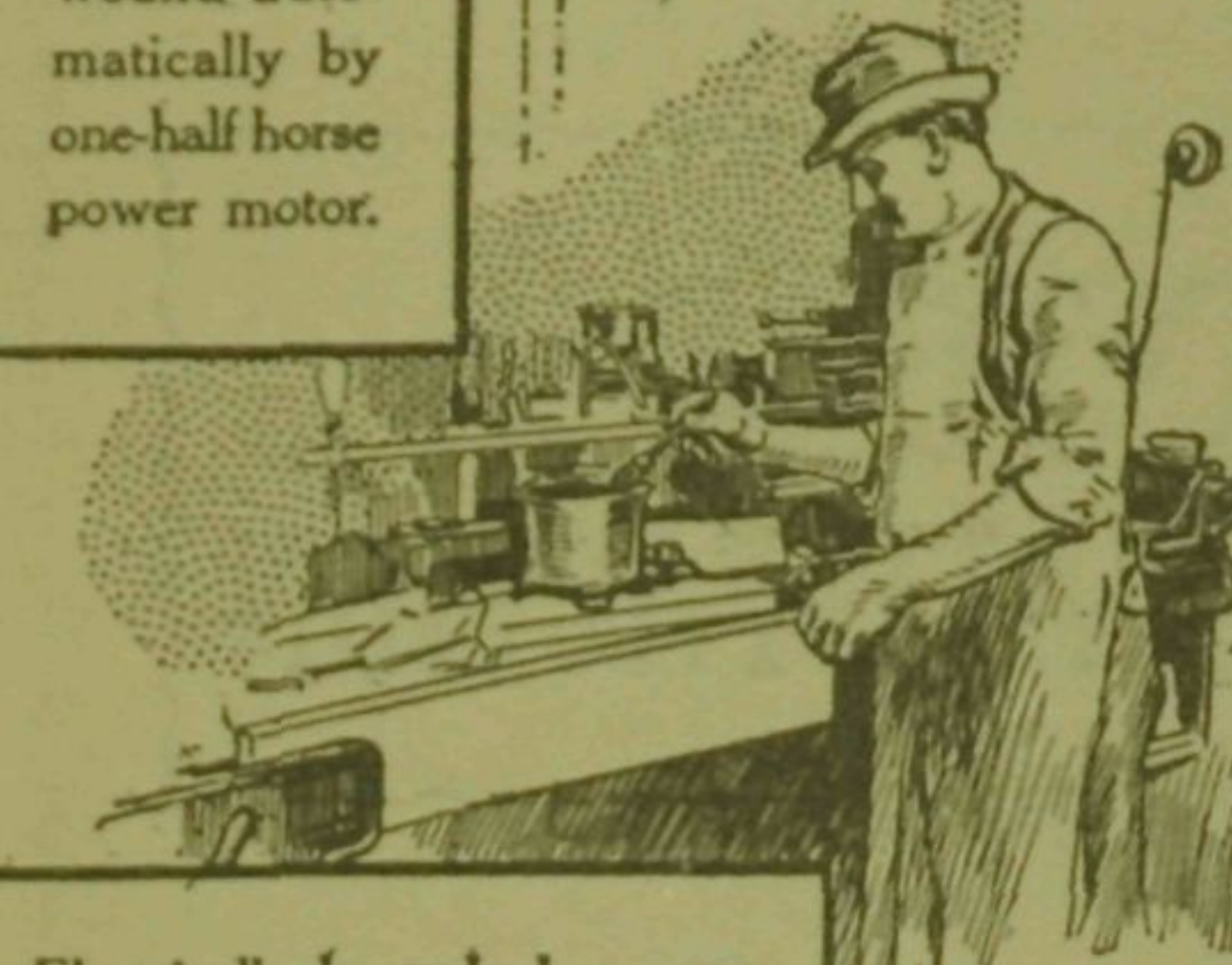


Tower clock wound automatically by one-half horse power motor.

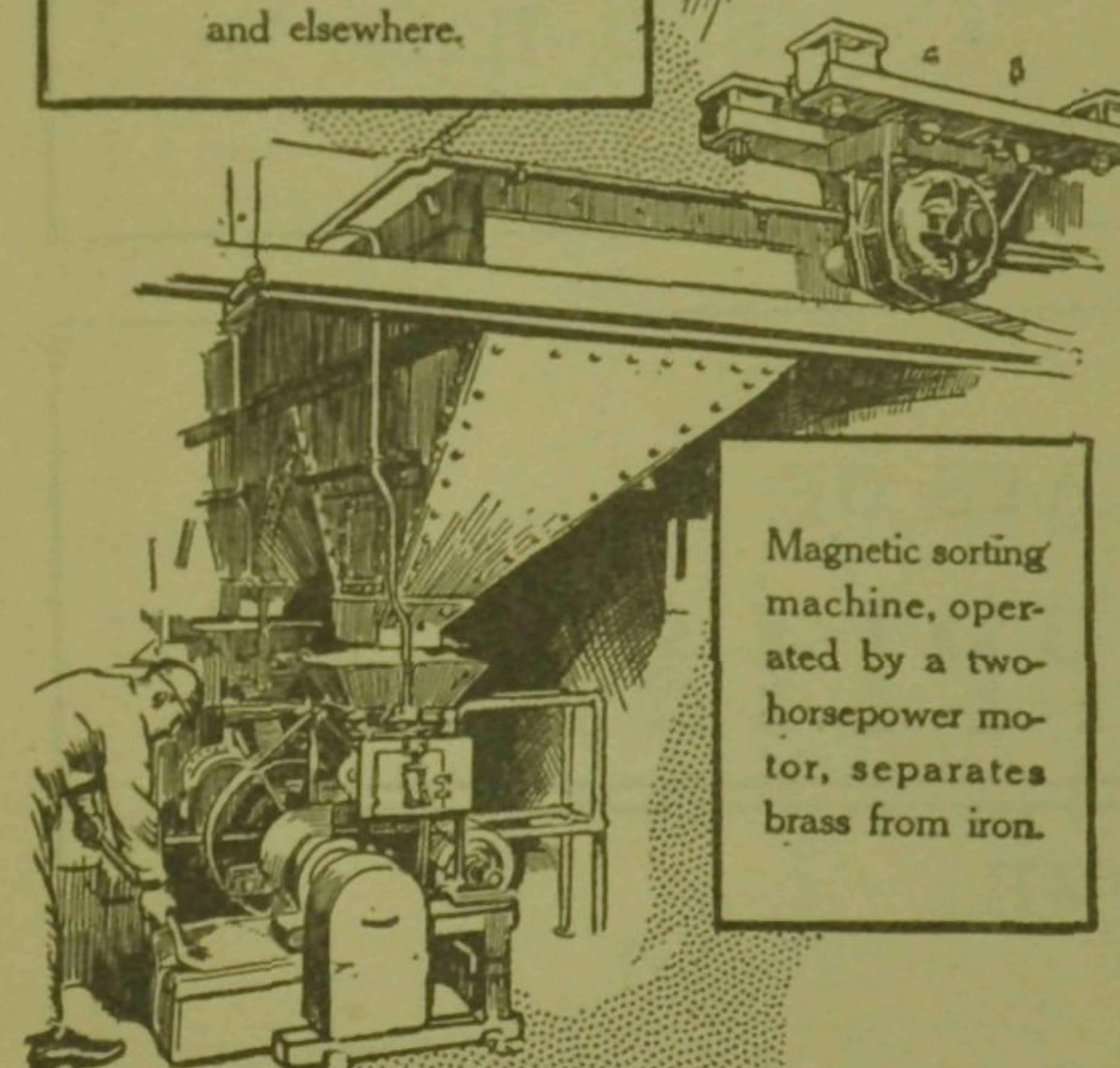


Electric monorail crane for hoisting coal.

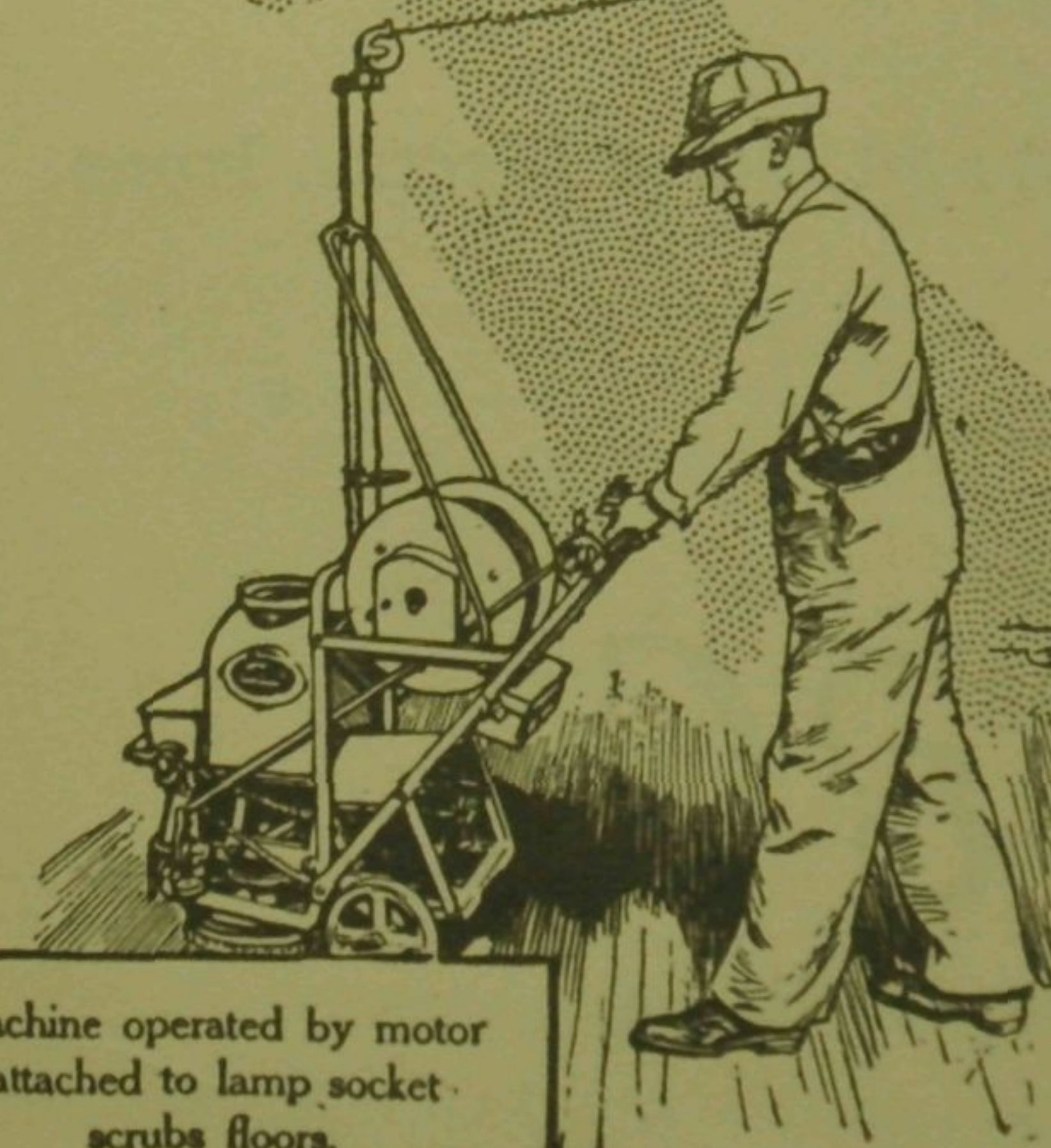
Motor-generator set mounted on crane supplying power for lifting magnet.



Electrically-heated glue-pots are used in pattern shops and elsewhere.



Magnetic sorting machine, operated by a two-horsepower motor, separates brass from iron.



Machine operated by motor attached to lamp socket scrubs floors.

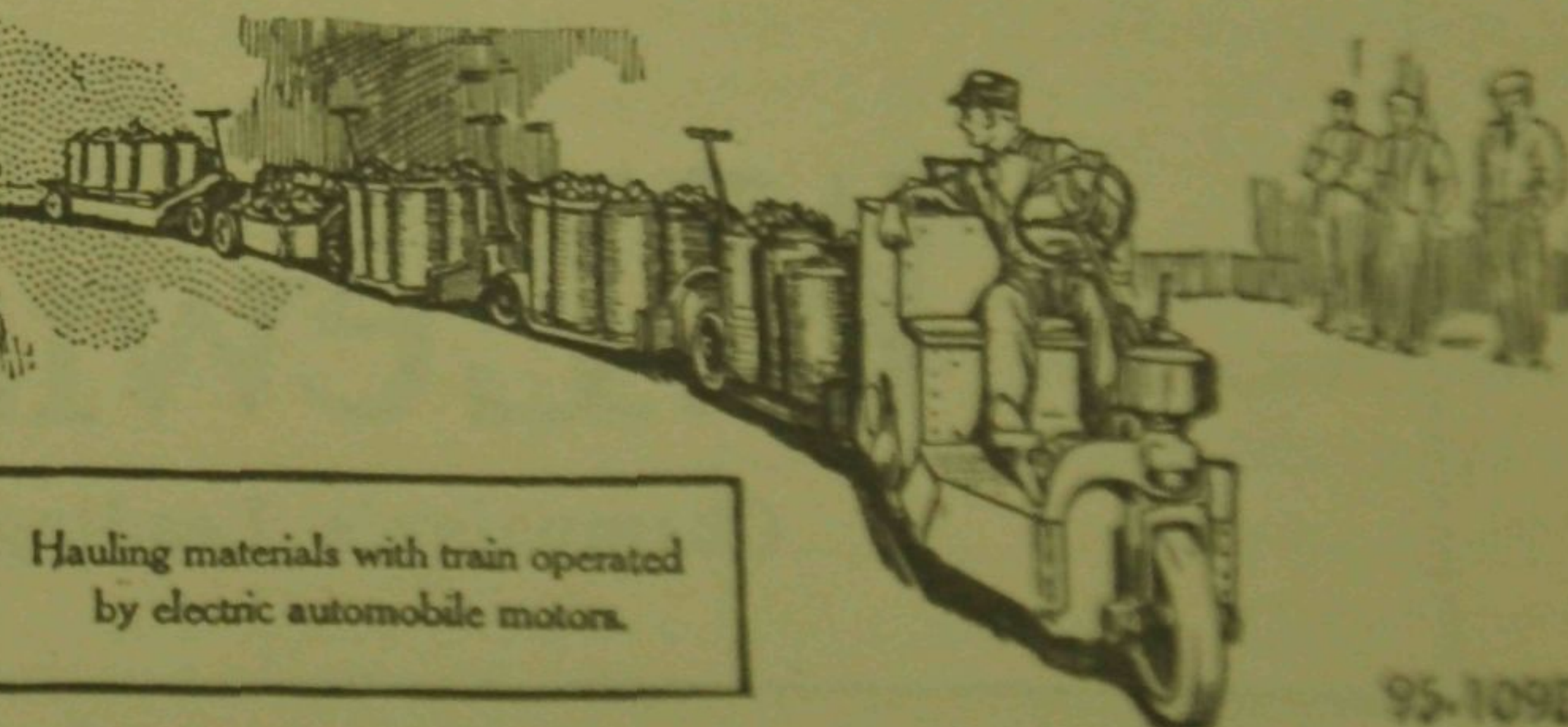
Electricity— the Master Force in Manufacturing

THE marvels of electricity have revolutionized our manufacturing industries. With belts and pulleys replaced by electric motors operating automatic—almost human—machines, many a slow and tedious process has been eliminated.

The Crane Company's plant at Chicago—electrical throughout—is a model of industrial efficiency. Its 10,000 horse-power of driving energy is brought by three small wires from a distant power plant. Then electricity drives the machinery which handles the coal for heating, cuts the steel, sifts the sand and sorts the material—in fact does everything from scrubbing the floor to winding the clock.

Such an institution is marvelous—superhuman—made thus by the man-multiplying force of electricity. The General Electric Company has been instrumental in effecting this evolution by developing efficient electric generating and transmission apparatus and by assisting in the application of electrical energy to a multitude of needs.

General Electric Company
General Office Schenectady, N.Y. Sales Offices in all large cities.



Hauling materials with train operated by electric automobile motors.

KEEP YOUR KODAK LOADED

This is the time for Kodaking
We give 24 hour film service
Drop films in the film box when we are closed

STUDENTS SUPPLY STORE
SERVICE SAVING SATISFACTION

On Green Street

C. W. Bailey '14 Managers S. D. Himes '21

COMPLETE DISPLAYS OF **ELECTRICAL APPLIANCES**

FOR THE HOME

Electric Percolators	Toasters
Water Heaters	Discs
Curling Irons	Tourist and Home Electric Irons

W. Lewis & Co.

Champaign's Leading Dep't. Store

Seventh Biennial ELECTRICAL SHOW

University of Illinois

April 8, 9 and 10, 1920

Gymnasium Annex

Electrical Laboratory

Under Management of the Electrical Engineering Society

H. L. Wright, President

FACULTY OF THE ELECTRICAL ENGINEERING DEPARTMENT

Professor E. B. Paine	A. R. Knight
Professor E. H. Waldo	E. A. Reid
Professor Morgan Brooks	P. H. Burkhart

BOARD OF MANAGERS

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Washing Machines
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SWARTZ ELECTRIC SHOP

Main 255

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E. V. Kirby Auto Co.

Ford

Cars and
Trucks



Fordson

Tractors

Urbana

Champaign

Rantoul

Mahomet

ANNOUNCEMENT

The Electrical Show management has arranged all exhibits so that no visitor will receive the slightest electrical shock.

PROGRAM

GYMNASIUM ANNEX

1. Signal Corps Exhibit

All of this apparatus in this exhibit was used by the Signal Corps during the war and much of it was developed at that time and has been kept secret.

In charge of Lt. H. J. Herrman

Assistants—

R. Pauls
F. Knight
J. Marquardt
S. E. Williams
C. McDonald

B. Sharpe
J. Aiken
S. Durst
J. B. Holston
B. Barbee

J. Cavins
R. Hayes
C. Johnson
C. Kocour
M. Wallin

2. Central Electric Company

Chicago

Steel reflectors, porcelain enameled, designed to comply with the Illuminating Eng. Society Code and state code. Featuring "Maxolite" diffuser, "Ralco" receptacles, a line of heavy duty receptacles and plugs for industrial plants.

3. Chemistry Club

In charge of M. J. Pearce '20

A. Explosives: Discussion of types, development, and methods of manufacture, together with demonstration of their synthesis, explosive action, etc. A display of many used in the war.

W. J. Carthaus, J. H. Waldo, Cedric Hale

B. Dyestuffs: The synthesis of some of the most used dyes and their application. Samples of the dyes in all stages of manufacture.

J. H. Ingmanson, J. Handler, M. E. Dreyfuss

C. Phosphine: Learn how to blow perfect smoke rings, watch them burst in the air.

R. G. Stevens, W. S. Muncie

D. Destructive Distillation of Coal: A demonstration of the production of illuminating gas, coke, and the recovery of by-products. An electric furnace is used as the source of heat.

J. E. Hansen, F. G. Straub

E. Synthesis of Water. Producing rainfall at your convenience. An electric spark explodes a mixture of hydrogen and oxygen forming water.

C. R. Tikotsky, L. Spiegler

F. Pyrometers and Their Uses: This shows an electric furnace in operation, the temperature being observed by means of electrical and other types of pyrometers.

J. M. Harsh, H. E. Brauer



Hot Point

Electrical Appliances

ARE, by far, the best obtainable, that's the reason you find a most complete line of this equipment here.

... Let Us Show You ...



The CO-OP STORE

On the Square



Illumination From Concealed Sources

secured with scientific
accuracy by the use of

X-RAY REFLECTORS

University Installations

The Armory
The Auditorium Stage
The Machine Shop
The Architectural Drafting Room

National X-Ray Reflector Co.

New York

CHICAGO

San Francisco

G. Parr Coal Calorimeter: Determining the heat value of various fuels. An electric current is used for firing the charge and to operate the stirring device. Made of 'Illium' the new alloy developed by Professor Parr and named in honor of Illinois.

O. M. Holtzman

H. Electrolytic Titration. Using an electric current to show the end point of a titration.

F. B. Rinck

I. Electrically Controlled Thermostat. By means of this apparatus the bath can be maintained at a constant temperature. It is entirely automatic and the temperature variation is less than one hundredth of a degree.

C. W. Rodewald

4. Summers Electric Company
Laundry equipment demonstration.

Champaign

4a. Beardslee Chandelier Company
The manufacture of the lighting fixture from the mold showing the steps necessary for the completed fixture.

Chicago

5. Voice on the Oscillograph
By means of the device shown, the oscillograph, different sound waves are thrown on the screen so that you can see them.

T. D. Owens '20

6. Caldwell Electric Corporation
"Compolux" fixtures and metal chandeliers and brackets. floor and table lamps. Parchment and silk shades.

Champaign

7. Commonwealth Edison Company
The right and wrong way of using appliances.

Chicago

8. Ideal Electric Company
Farm lighting systems. Illumination demonstration.

Champaign

9. Homer Light and Power Company
Showing the methods in which farm buildings may be lighted from transmission lines.

Champaign

10. Westburg Engineering Company
"Weston" Electric Indicating Instruments comprising the latest developments in electrical indicating precision instruments, including a display of automobile instruments and garage and battery testing voltmeters and ammeters.

Chicago

11. Electric Ouija Board
"Elecks Eskem" will tell you pretty nearly anything you may want to know. Absolutely no fake. The answer to your question is controlled entirely by chance.

H. R. Bosworth, G. H. Simmons

12. Schweitzer & Conrad Co.
High Voltage Specialties.

Chicago

AUTOMOBILE SATISFACTION EMBODIED IN



The car that made a year's mileage in one week in Indianapolis,
February 25 to March 3, 1920

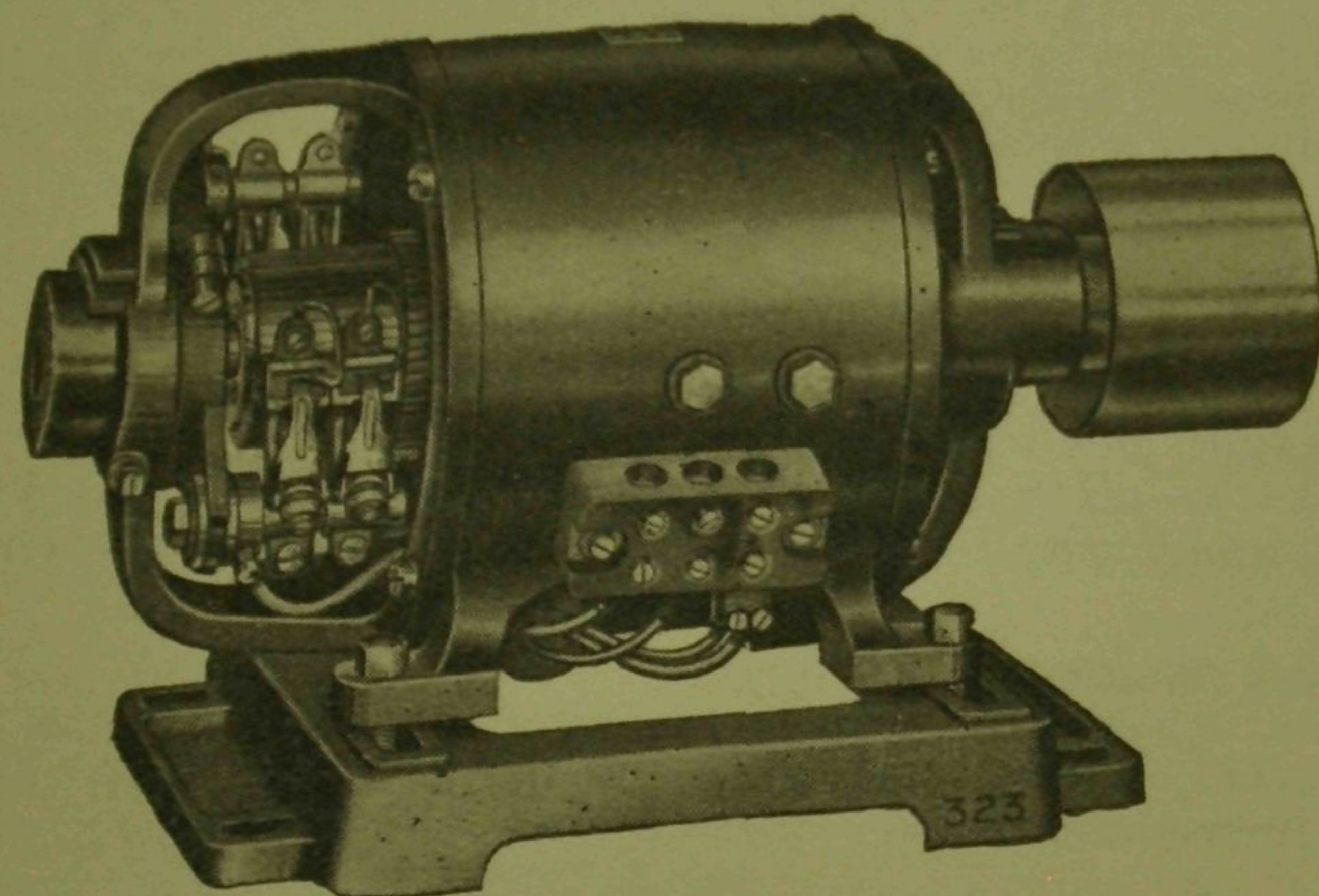
WILLYS—KNIGHT—OVERLAND
Guaranteed Service

OVERLAND-RICKARD CO.

Opposite Interurban Station

Champaign

ROTH ELECTRIC MOTORS AND DYNAMOS



Be sure to see the Meter Testing Set recently made by us for
the University

A. C. MOTORS
GENERATORS
D. C. MOTORS
GENERATORS

ROTH BROS. & CO.
Office and Factory
1400 W. Adams St.,
CHICAGO, ILLINOIS

13. White Electric Co. Champaign
"Duplexalite." Western Electric farm power plants. E-Z-Way washers.

14. Brotherhood of Electrical Workers Champaign
A display of the right and wrong methods of wiring.

15. Kruse Electric Shop Champaign
Washing machines, Vacuum Sweepers, Sewing Machines.

16. Western Electric Company Chicago
An interesting and instructive exhibit of telephony. Learn what happens when you call "Central."

17. (a) Long Distance Radio Receiving Station
This set is equipped to receive signals from stations as far distant as San Diego, Cal., Mexico City, Mexico, Lyons, France, Nauen, Germany. A weather report and time signals from Arlington, Va., at 9:00 P. M.
J. C. Howard, E. R. Nightingale

17. (b) Storage Battery Exhibit
A complete display of the different kinds of storage batteries with an explanation of their working principles. Notice how a storage battery is built up from its parts. Ask the demonstrator about the best methods of taking care of your battery.
H. C. Harmeling

18. (a) Optical Illusions
Now you see it and now you don't. A clever arrangement and control of lighting. Can you not believe your eyes?. You cannot.
J. M. Agnew

18. (b) A Test of Curiosity
A bet is up as to whether there will be more men than women seek information thru this medium. Step up girls, don't let the boys show you up as greater seekers after knowledge.
S. S. Wolff

18. (c) Miniature Magnet
See this adaptation of the electro-magnet to practical work. Thousands of tons of magnetic material are handled this way every day.
J. R. McLaughlin '20

18. (d) Information Bureau
Don't leave the building with a question unanswered. The man in charge here don't know everything but he will answer all questions that he possibly can. This is an educational show and we want everyone to learn as much as possible.

18. (e) Gym. Annex Sub-station
This station supplies the means of controlling the current used by the various exhibits in this building. The apparatus in this station represents the engineering practice of the earlier days of electricity.
In charge of G. H. Simmons '20

We have listed FOR SALE choice residences well located, and in comparison to the cost of new buildings the prices are more than reasonable.

MONEY TO LOAN ON CITY PROPERTY

All kinds of insurance written in the best of old line Companies.

General Agents: Mutual Life Insurance Co. of N. Y.

T. A. BURT LOAN COMPANY

112 West Main Street

Urbana, Illinois

You can bring your printing to us with the same confidence that you have when you take your money to your banker. We know how to serve you. No one can serve you better.

FLANIGAN-PEARSON CO.

Printers Binders Engravers

10-12 Chester Street Champaign, Illinois

Here it is in a nutshell: Get what you want; get it right. If you get it here and think it isn't right, we'll make it right, isn't that fair?

Kuppenheimer, L System and Style Plus Clothes

THE STORE FOR MEN AND BOYS

J.M.KAUFMAN

AND COMPANY

19. Centerpiece

The invention of the incandescent lamp paved the way for all electrical illumination and increased the working hours and conditions of all industries. The centerpiece, a fantastical enlargement of an incandescent lamp is erected in honor of this invention.

Designed by G. H. Simmons '20

Built by G. H. Simmons '20

G. W. Lyons '23

E. P. Robertson '23

C. F. Andrews '21

M. O. Naramore '22

20. A. S. Nelson & Sons

Milburn Electric. Mercury arc rectifier for charging storage batteries. Champaign

21. Physics Department

This exhibit will have several things that have been developed in the research laboratories of the Physics Dept. The singing tube, the wireless recorder, the photo-electric cell and many others too numerous to mention.

22. Commercial Electric Co.

Electric Ranges.

St. Louis

23. Meter Exhibit

Learn the truth about that wonderful machine, the electric meter. All kinds of the familiar house meters are on display as well as some less known types which are used on special work. If you wish to learn to read a meter, this is the place to get your information.

C. N. Clark

24. National Lamp Works

An interesting historical collection of lamps from those in use in bible times down to the newest types. Other interesting exhibits of lamps and their application to present use.

Nela Park, Cleveland, Ohio

25. Swartz Electric Co.

Electric washers, ironers, heating appliances and Hoover suction sweepers.

Urbana

26. (a) Electromagnet Exhibit

An electromagnet with only two dry cells attached will successfully resist the pull of the strongest man. Other interesting uses of this adaptation of electricity.

R. J. Donaldson '21

26. (b) Melting Glass by Electricity

When glass is heated to red heat it becomes a good conductor of electricity. The glass finally melts due to the heating effect of the current passing thru it and breaks.

L. A. Drew '21, A. A. Kral '21

26. (c) Electric Fortune Teller

Another opportunity to find out just what the future holds for you. The Electrical spirits which actuate this mechanism are extremely potent. Don't ask it too many embarrassing questions for this machine has the habit of telling the truth.

F. C. Armstrong '21

Meet Us at The Show

SEE OUR

Labor Saving Devices
Artistic Lighting Fixtures
Student Lamps
Heating Appliances
Paramount Talking Machines and
Farm Lighting Plants

We carry only high grade merchandise
See us For Anything Electrical

IDEAL ELECTRIC CONSTRUCTION COMPANY

Opp. Inman Hotel

Buy the Best Phonograph

BUY THE BEST RECORDS

BUY THE BRUNSWICK

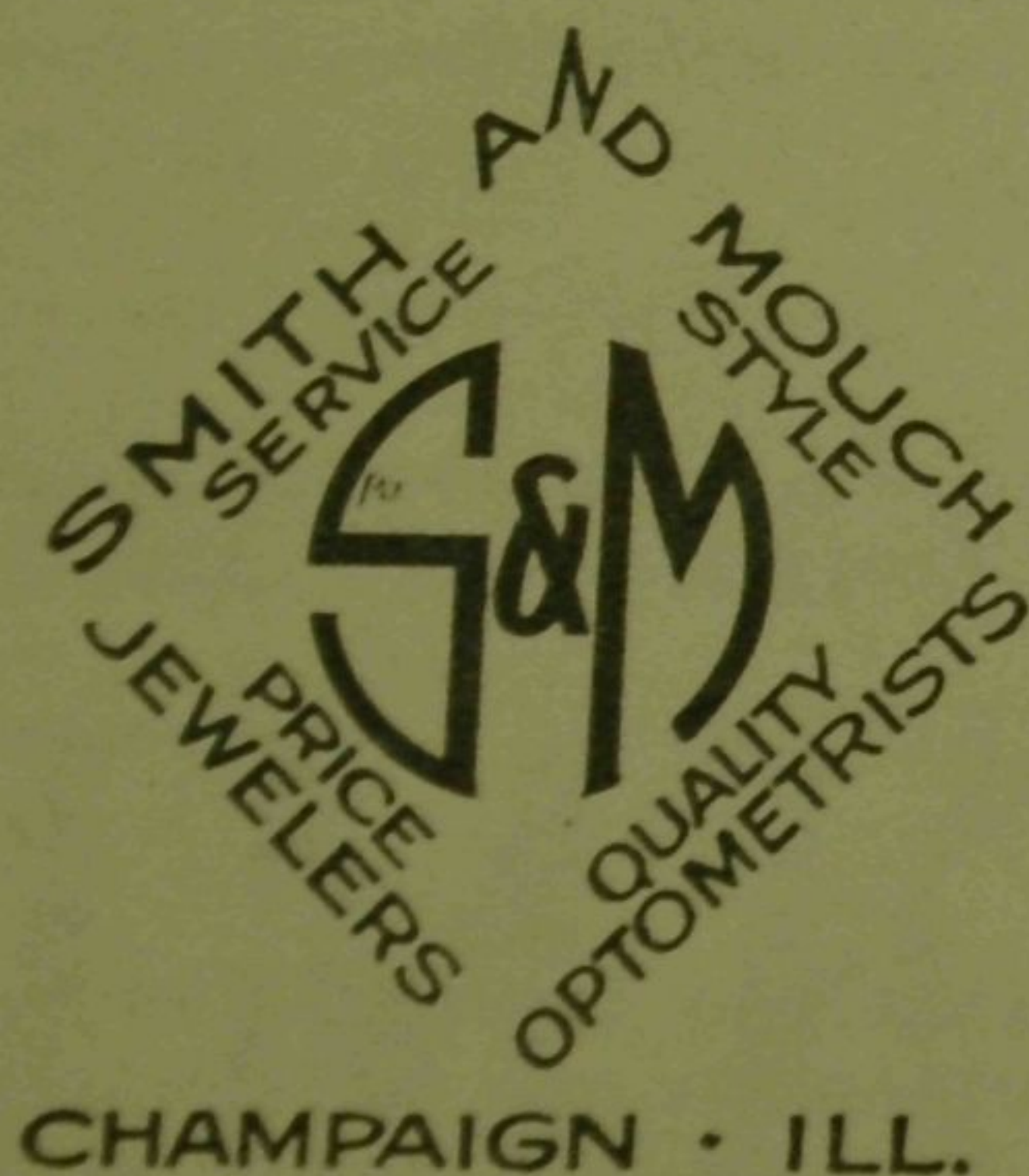
Hear Oscar Schoeffler Play on Brunswick Records
Play any old kind of Record at its best on The Brunswick
Phonograph

Sold By

Moorehead Furniture Co.

Neil and University

Champaign



CHAMPAIGN · ILL.

—Zom is showing a large and attractive line of new spring suits for University men.

They're all-wool, single- and double-breasted—in worsteds, tweeds, serges, flannels—and other materials.

\$45 to \$75

Roger Zombro

Green Street—of course

26. (d) Everflowing Coffee Pot

Here's a deep one. Think of a device like this for a restaurant with coffee at ten cents a cup. Get-Rich-Quick Wallingford isn't in it with this contraption.

F. I. Jirka, F. C. Armstrong

27. (a) Electric Dog House

Did you ever want your dog to come quickly to chase an aggressive book-agent? Install one of these under the family Fido and we will guarantee that the results will be astonishing (to Fido).

27. (b) Cost of Running Appliances

A meter has been calibrated in cents per hour so that when an electric appliance is connected to it, the cost per hour to run it is registered on the dial. If you have any appliance which you think is consuming too much power, bring it in and have it tested.

Designed by H. L. Wright '20

28. Dancing by Wireless

Something new. Soon all you will have to do to dance is to tune in with the family wireless set and the music will be provided free. The apparatus used was contributed by the Signal Corps and the Automatic Electric Company of Chicago.

In charge of H. J. Herrman

ELECTRICAL ENGINEERING LABORATORY

29. (a) Bell Telephone System

A skeleton board with all of the circuits necessary for a local board. The apparatus on this board is old fashioned and is not of the latest types. This shows in a clever and simple way just what has to be done to make a complete local call in a single office district.

In charge of F. H. Chase '21

29. (b) Automatic Telephone System

The automatic is the future telephone system. Showing the latest switching equipment of the Automatic Telephone Company. This exhibit is made possible thru the courtesy of the Automatic Telephone Company, who presented the apparatus to the Department of Electrical Engineering.

In charge of G. H. Simmons '20

Assistants—R. L. Pentland '21, G. W. Lyons '23

30. (a) Silhouettes

A clever way of showing pictures.

L. M. Plym '21

30. (b) Tesla Coil. High Frequency Exhibit

Lookee! 1,000,000 volts, 500,000 cycles. See those death defying demons take the full discharge thru their own bodies, lighting lamps by the current taken thru the body. Puncturing glass plates, lighting Giessler tubes having no metallic connectors, discharge between parallel electrodes, electric letters and curious impedance effects. This is one of our best exhibits. Be sure to see it all.

In charge of M. C. Boice '20

Assistants—W. Young '21, F. S. Carter '20, W. B. Austin '23

D. A. Rittenhouse '20

Senior Special

Duplicate orders from your
Senior negative \$3.00 per
dozen.

The Maguire Studio

220 West Main Street
Urbana, Illinois

Bring in Your THESIS

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Prices Right
Satisfaction Guaranteed

R. C. WHITE & CO.

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"Royal" and "Corona" Agency

SUMMERS ELECTRIC COMPANY

ELECTRICAL AND CONTRACTING ENGINEERS

Agents for

CRYSTAL WASHING MACHINES, LAUN-
DRY-ETTE WRINGERLESS WASHERS,
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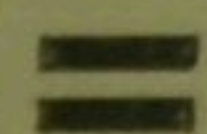
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316 N. Hickory St.
On the Way to the "Orph"

Champaign

B. E. SPALDING'S DRUG STORE

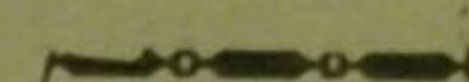
COR. GREEN & 6TH STS.



THREE REGISTERED
PHARMACISTS

Bell Phone 4046

Chandler Electric Shop



A. L. CHANDLER

General Electrical Contractor

128 W. Main St., Urbana, Ill.

30. (c) Giessler and Vacuum Tubes

Rare colors given off by the electric discharge thru these tubes.
Loaned to the Show by the Physics Dept.

31. U. & C. Railway Exhibit

An electric welder such as this company uses in their maintenance
and construction work. A comparatively new use of electricity. Champaign

32. Talking Arc

An electric arc can be used as a transmitter as well as a receiver of
speech. It is very sensitive and therefore has no commercial use.

F. H. Smith '20, D. B. Sumeriski

33. Human E. M. F. and Resistance of the Body

Have you a magnetic personality? We admit that everybody charges
you for everything you get, but how much electric charge have you? A
famous scientist says that your resistance and potential indicate your
vitality.

34. Conversion of Light into Electricity

This device has just been perfected by Dr. Jacob Kunz, of the Physics
Department. The experiment is extremely delicate and is based upon the
operation of a photo-electric cell.

P. D. Corneilsen '21, I. A. Cummings '21

35. Colored Illumination

The careful arrangement and delicate adjustment of lamps and color
screens permits wonderful lighting effects. The color of the light is caused
to gradually merge from one hue to the next until every color of the rain-
bow has been experienced. This system is often used for stage lighting
effects. The rheostats are loaned to us thru the courtesy of the Allen-
Bradley Company of Milwaukee, Wis.

In charge of W. C. Heckman '20, L. J. Hogue '21

36. First Aid Demonstration and First Aid Room

Altho the Show management has taken every precaution to protect the
public from any harm, we are prepared for any emergency. These men are
trained to render first aid and will give demonstrations.

In charge of J. C. Manley '20

37. U. S. S. "Electron"

The latest thing in battleships. It is propelled by electricity and the
gun pointing is done by the famous Ward-Leonard control, electricity instead
of powder is used to hurl the projectile.

In charge of R. S. Stanford '23

38. Automatic Electric Elevator

Push the button which carries the number of the floor to which you
wish to go and the car goes there and stops! The elevator in the Ad-
ministration Building operates on this principle.

W. C. Heckman '20, J. Z. Millar '23

39. Museum

These machines which look so queer today were the latest dope forty
years ago. Forty years don't look like much to an old man but the last

Homer Electric Light & Power Co.

Complete Electric Home Furnishers
Both in City and Country.

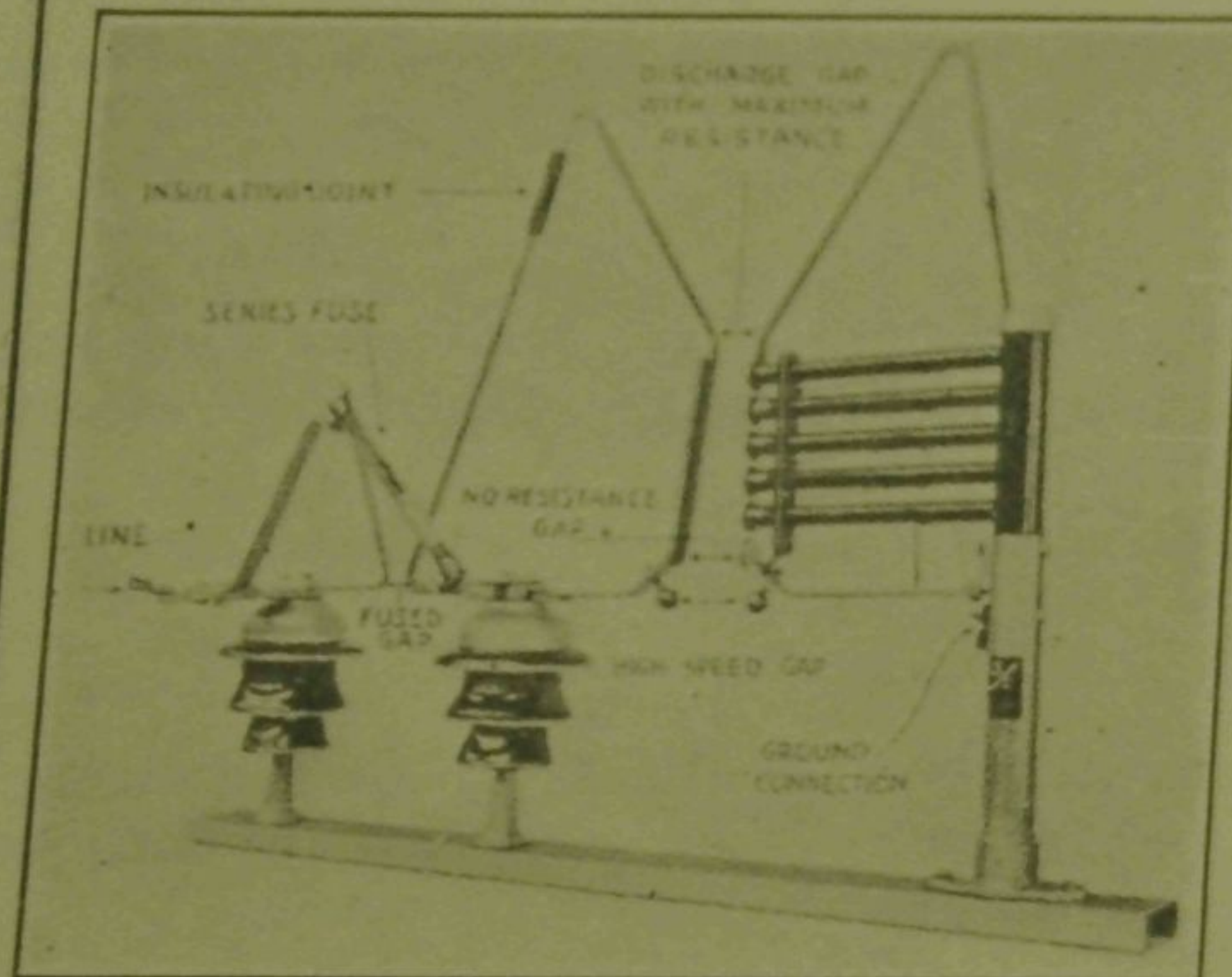
Electric Washing Machines, Irons
Vacuum Sweepers, Pumps and Motors.

Call at our Booth and let us show you
How we do it.

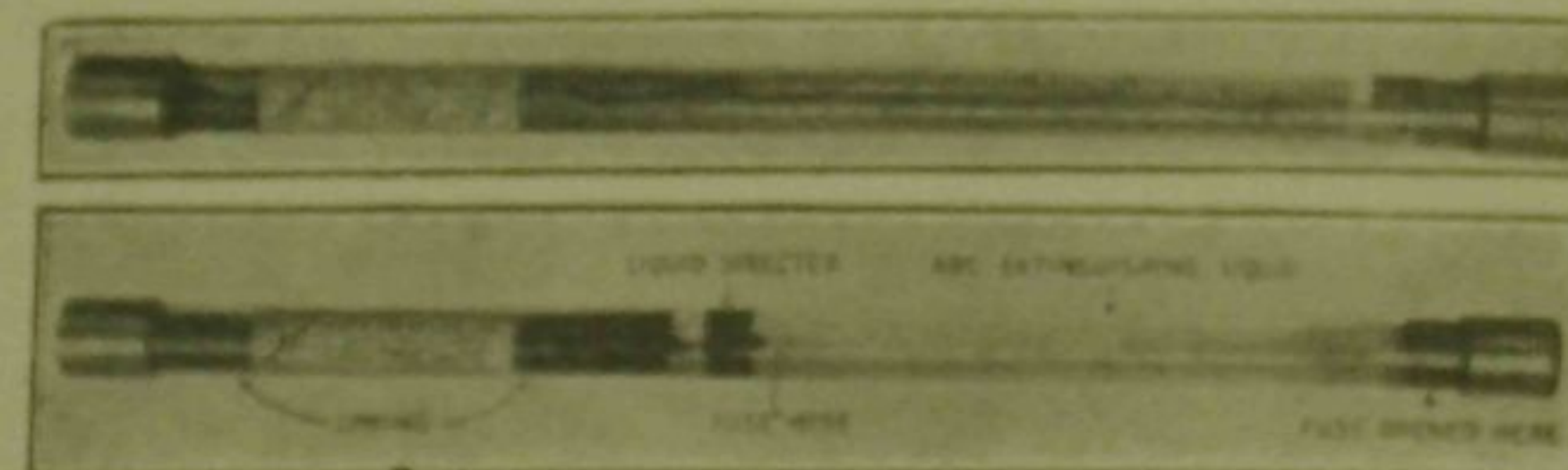
Homer Electric Light & Power Co.



HIGH VOLTAGE EQUIPMENT



S & C 25000 Volt Lightning Arrester



S & C 37000 Volt Fuse
Before and after Operation

MANUFACTURERS OF
Fuses—1000 to 150,000 volts
1 to 400 Amperes

Lightning Arresters
High Voltage Circuit Breakers
Primary Cut Outs
Fuse Mountings
Fused Switches
Disconnecting Switches
Choke Coils
Voltage Detectors
Relays
Recording Synchroscopes

SCHWEITZER & CONRAD, Inc.

4431-4439 Ravenswood Ave.,

CHICAGO

forty years has made undreamed of strides in the design and operation of electric machinery. Here's hoping that the next forty years will do as well.
F. W. Condon '20, R. E. Hickman

40. Hand Power Generator

Turn the crank and have a practical demonstration of the reason for the cost of Electricity.

Designed by H. L. Wright '20, E. G. Wear '21

41. Bucking Broncho

When a piece of electrical apparatus operates like this it is time to call in an alienist.

O. G. Brain '20

42. High Tension Ladder Spark

Air currents cause the spark to travel up.

E. P. Robertson '23

43. Pull of an Electric-magnet

This magnet which is used for a laboratory experiment can exert a pull of several hundred pounds.

44. Tin Can Motor

Bring in your old tin cans and watch us make motors out of them. This is no fake. A rotating magnetic field makes the tin can turn. This is the same principle as the induction motor.

F. D. Spofford '20

45. Heterodyne Action of Audions

Note the unique control that the operator has of the tone as well as the beats. Any tone within the limits of audibility can be obtained.

S. M. Durst '22

45. (a) The Ideal Motor

A direct current without either commutator or brushes.

In charge of J. T. Schott '20

46. Models of Old Motors

Showing some of the original types of motors.

R. E. Meyer '23

47. Street-car Motor Control

This is the same control system as is used locally on street cars.

48. Switchboard

From this board any power can be distributed to any station in the Electrical Laboratory. The power is received at 440 volts A. C. and is changed to 110-220 D. C. by the motor-generator set.

In charge of P. B. Burley '20

49. Safety First Tower

Electrical machinery is dangerous when improperly handled. Patrons of the Show are advised to follow the advice of the sign while visiting the Show. When in doubt, take the safe course.

Designed by G. H. Simmons '20

Built by E. F. Kinson '23, G. H. Simmons '20, E. G. Krause '22

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C. E. COX, Proprietor



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START NOW. If your first deposit is only a dollar, that dollar will be the stepping stone to success in the future. Money deposited with us is drawing 3% interest—working for you while you sleep.

UNIVERSITY STATE BANK

50. Synchronization of Three Phase Alternators

In order to connect alternating current generators in parallel they must first be in synchronism which consists of the same frequency, voltages equal and opposite in phase position. The rotating lamps indicate the proper moment for closing the switch.

51. Whirling Egg and Incandescent Fountain

Columbus could not make an egg stand on end without breaking the shell but this device makes it possible. An incandescent lamp makes a good fountain for the dinner table if you know how to make one.

L. R. Beauman '21, H. R. Fugua '22

52. Synchronous Rotary Converter and Switchboard

This six-phase machine and its control apparatus is a recent acquisition to the laboratory equipment and provides the means for many interesting experiments.

53. Fool-proof Motor

This motor is provided with a control panel with relays which absolutely prevent any harm being done to the motor no matter how inexperienced the man is who operates it.

54. Inductor Alternator

This machine was built by students in the department and is the only machine of its kind which we have. All of the parts which carry electric currents are stationary.

55. Monorail

The advantage of this type of locomotion is that it requires only one rail and eliminates side thrust on the curves.

56. Why Auto Wheels Turn Backward in the Movies

A clever demonstration in which a spark is used instead of the movie shutter to 'stop' the rapidly revolving wheel.

R. H. Dawson '20, A. C. Johnson '20

57. The Domesticated Autocrat

Our old enemy the ex-kaiser saws wood and dreams over his unsuccessful attempts to own the earth. May his wood-pile increase.

R. M. Zook '23

58. Perpetual Motion. Problem of the Ages SOLVED!

The two things which tend to stop a pendulum, air resistance and friction have at last been made to work together, and perpetual motion is the result.

John W. Arnold '21

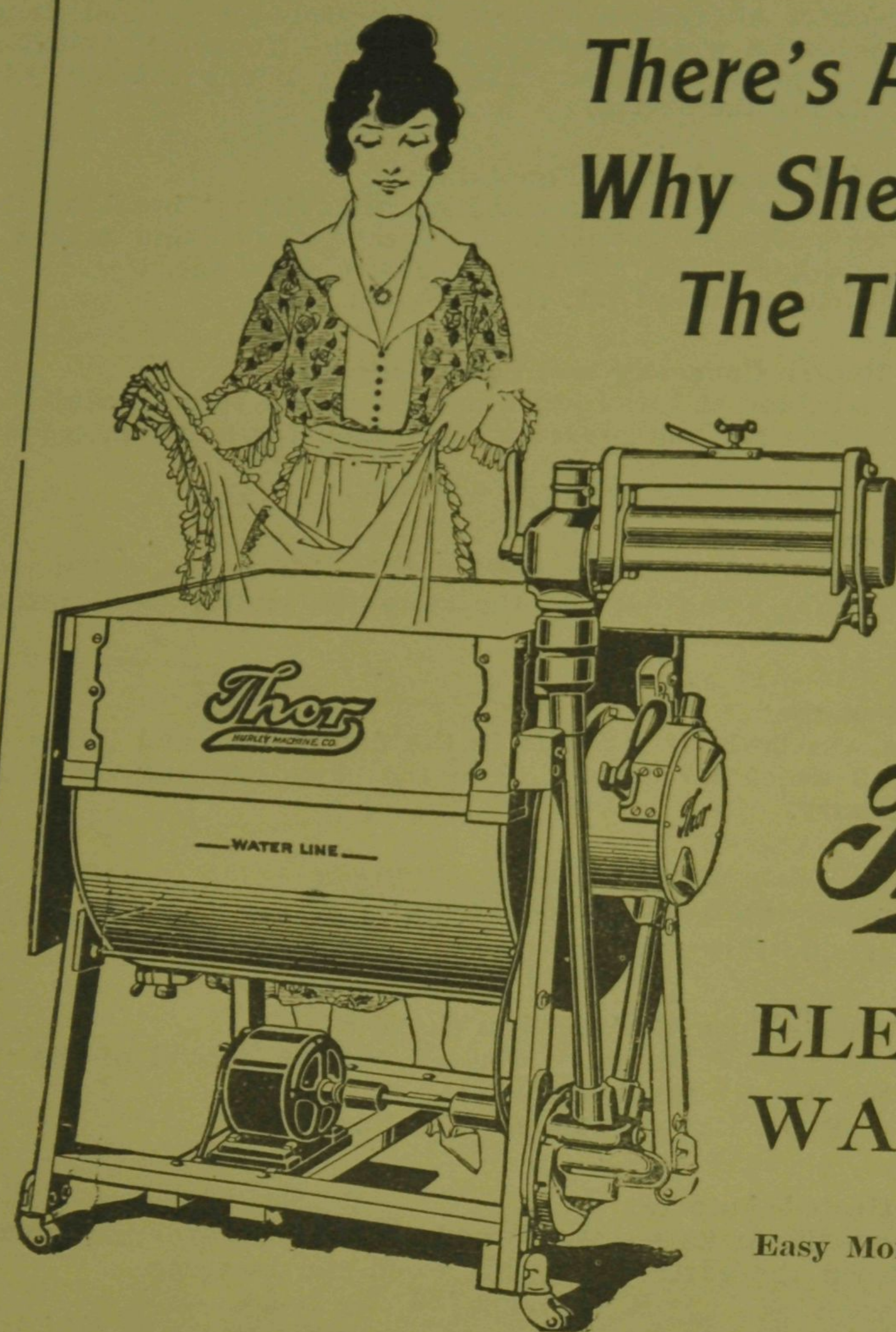
59. Switchboard

This switchboard controls the distribution of electricity to the South end of the laboratory. Note the regulator for keeping the voltage constant.

60. Ring the Cane

Here's your chance to try your skill. This cane possesses some remarkable qualities which make it almost unringable.

R. Hasenpflug '20, C. L. Brook '22



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61. Electric Welding

This apparatus illustrates the resistance or contact method of fastening two pieces of material together.

L. L. Pelton '23

62. High Tension Transformer

This transformer will step up from 110 volts to 200,000 and is used to test insulation materials for breakdown. Note the precautions to protect the operator from this dangerous voltage.

H. R. Bosworth '20

63. Static Machine

The principle of static electricity and its relation to kinetic electricity. All kinds of harmless sparks and discharges.

L. L. Pelton '23, H. J. Hueuer '22

64. I. W. W. Motor

This used to be a good useful motor but the 'Reds' used it a while and now look at the darn thing. Exhibited as a horrible example.

H. L. Wright '20

65. 1000 Ampere Generator

This generator is used for electroplating and for other high current work.

66. 5,000 Volt Direct Current Railway Motor

This motor was built for experimental purposes and after it had served its purpose was donated to the University. It is used as a generator to supply high voltages for experimental work.

67. Storage Battery Room

These batteries are of 240 ampere-hour capacity and are used for experimental work and research in the laboratory. Note the Mercury arc rectifier used for charging these batteries.

68. Electric Furnaces and Vacuum Pumps

It was in this room and with this apparatus that the high permeability iron which made possible great progress in transformer design was perfected. Note the wide range of temperature control.

W. D. Cannon, Graduate

69. The Traveling Sign

This is the only sign of this type this side of Chicago. It is modeled after the one on the State-Dearborn 'L' Station. It has been designed and built entirely by students.

Designed by W. L. Kenney '20

Assistants—R. E. Eddins '22, D. A. Rittenhouse '20, A. C. Johnson '20

F. W. Condon '20, R. H. Dawson '20

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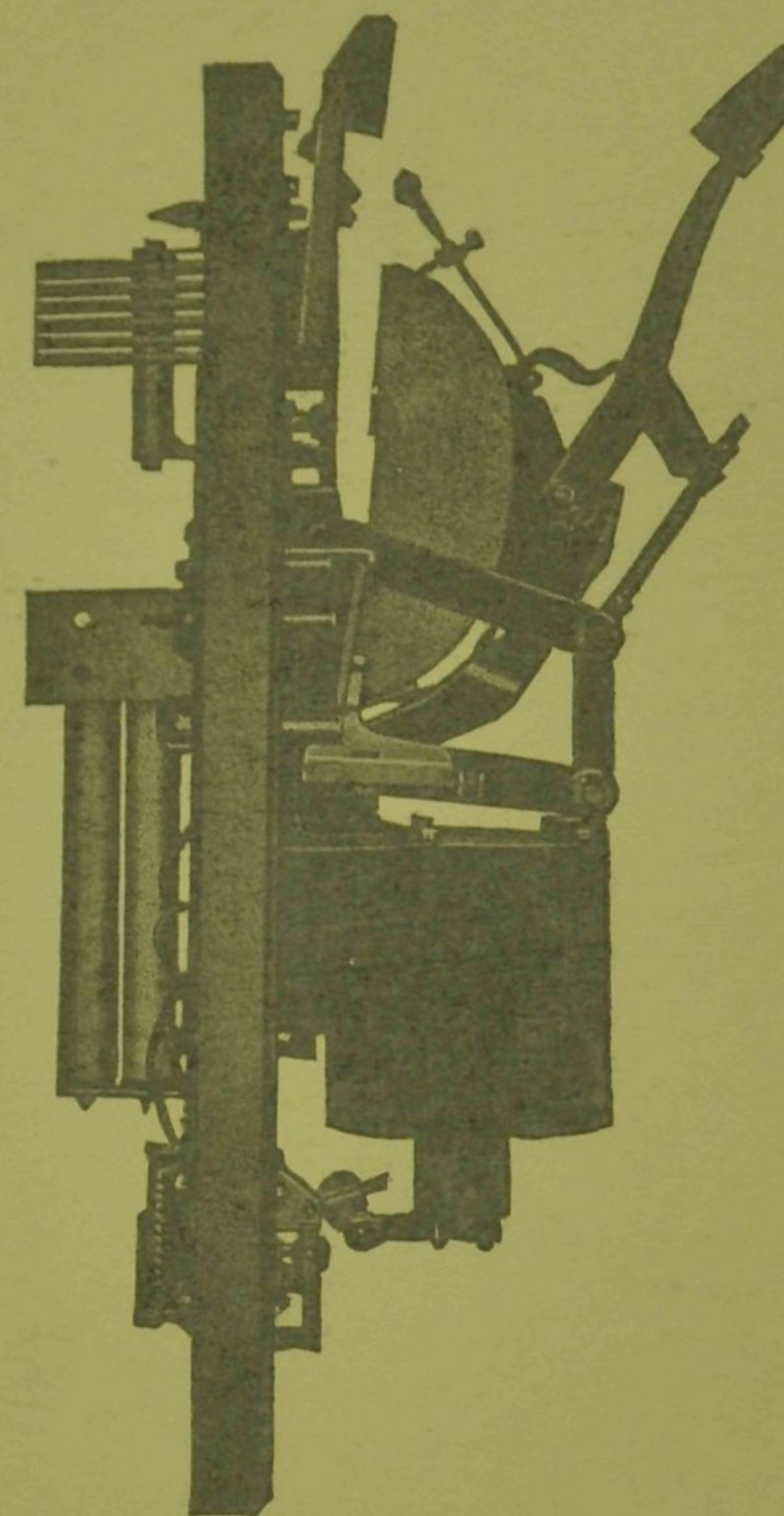
Sangamo Meters are used on practically all battle-ships and submarines in the United States Navy; in the coast defenses; Panama Canal; on every Pullman car, and in connection with the electric car lighting of almost every railroad in the country; and in many other services too numerous to mention.

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